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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,428	11/13/2006	Johannes Alfred Beele	B1215.70009US00	8909

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BOSTON, MA 02210-2206

EXAMINER
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HOLLOWAY, JASON R

ART UNIT	PAPER NUMBER
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3664

MAIL DATE	DELIVERY MODE
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12/07/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,428	<b>Applicant(s)</b> BEELE, JOHANNES ALFRED	
	<b>Examiner</b> JASON HOLLOWAY	<b>Art Unit</b> 3664	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-16 is/are pending in the application.
- 4a) Of the above claim(s) 6, 14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7-13 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20 October 2010</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 October 2010 has been entered.

### ***Response to Amendment***

2. The previous claim objections are overcome by applicant's amendments.

3. Applicant's arguments filed 20 October 2010, with respect to the rejections of claims 1 and 5 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 3-5, 7-13 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Regarding claims 1 and 5, the recitation that the “..fire-retardant material is present in such a high amount that a fire retardant crust is formed...” is indefinite. It is impossible to ascertain from the claim what a "high amount" of material entails.

Further regarding claims 1 and 5, unclear what is meant by “a fire retardant crust is formed on a side of the foam...” It seems the foam would begin to expand from the exposed side but over time, wouldn't the entire piece of foam expand, or is the opposite side of the foam composed of a material that does not expand?

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 3-5, 7-10, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landin (5,719,199).

**Regarding claim 1**, Landin teaches a fire-resistant material comprising an elastomeric foam (column 3 lines 38-39 teaches it is preferred to use a material with elastomeric properties, thus it would be obvious to one of ordinary skill in the art based on the disclosure of Landin to provide a material having this property) of cross-linked ethylene vinyl acetate with a substantially closed cell structure (EVA) (column 4 lines 21-24 teaches an elastomeric foam EVA which is substantially closed celled, i.e. "AIRFLEX 600BP"),

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wherein the foam further comprises at least one crust-forming fire-retardant material and a pH neutralized graphite material (see column 7 lines 16-29 for intumescent graphite; see also column 16 lines 50-55 which teaches an embodiment of the invention which uses pH neutralized graphite),

wherein the crust-forming fire-retardant material has been selected from poly ammonium phosphate and/or melamine phosphate (see column 9 lines 44-52 which teaches an additive of ammonium polyphosphate can be added to the crust forming material), and

wherein the crust-forming fire-retardant material is present in such a high amount that a fire-retardant crust is formed on a side of the foam when directly exposed to high temperatures due to the presence of a fire, wherein the fire-retardant crust provides a shield against the effect of the fire (It would have been obvious to provide an appropriate amount of expanding material. This is the purpose of the invention of Landin, see at least column 11 lines 12-24).

**Regarding claim 3**, Landin teaches the graphite material expands at a temperature higher than 200°C (column 2 lines 64-67 teaches the intumescent material expands at temperatures above 100°C, thus the examiner contends the material would also expand when subjected to temperatures above 200°C).

**Regarding claims 4 and 13**, Landin teaches the material in the form of a plate-shaped or beam-shaped element (column 11 lines 38-46 teaches sheets of fire barrier material, which the examiner contends is equivalent to plates)

**Regarding claim 5**, Landin teaches the claimed material properties of the invention as addressed above in the rejection to claim 1, including the additional limitations of sealing off, at least during a fire taking place adjacent a wall in at least one of a virtually entirely flame-tight manner and smoke-tight manner an opening extending through this wall, through which a transporting device comprising at least one of a cable, duct and pipe has been fed, the system being provided with elements manufactured from a fire-resistant material which expands under the influence of temperature increase (column 14 line 49 to column 15 line 29 teaches an example of use of the invention of Landin wherein plastic pipes are fed through a concrete wall (slab) and fire barrier layers were added to stop the penetration of fire and smoke).

**Regarding claim 7**, Landin teaches the system is designed such that the elements can be fixed in a self-clamping manner in the opening or in a casing thereof through mutual contact, contact with an inner wall of the opening or contact with the transporting device (column 15 lines 8-16 teaches the fire barrier fixed in contact with the transporting device, i.e. the plastic pipe; see also column 11 lines 38-50).

**Regarding claim 8**, Landin teaches the system is capable of being substantially fixed within a volume which is bounded by a first outer surface of the wall and a second outer surface of the wall located opposite the first outer surface (this is described in the test of Landin in the passage of the specification cited above).

**Regarding claims 9 and 16**, Landin teaches after the system has been fixed in the opening, parts of the opening which are free from the transporting device are sealed off by the system (via the intumescent expanding material described by Landin).

**Regarding claim 10**, Landin teaches the system is designed such that after fixation in the opening, the system is ready for use (it would be obvious to one of ordinary skill in the art that once the system is put in place, the system is ready for use, the examiner construes once the system of Landin is in place, it is ready to be used).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landin (6,153,674) in view of Fay (6,484,463).

**Regarding claim 11**, Landin teaches at least one of the elements is plate shaped (see rejection to claims 4 and 13), however, Landin fails to explicitly disclose the plate is provided with a line of weakening, the at least one element being detachable by breaking along the line of weakening in the plate-shaped material.

Fay teaches fibrous insulation panels which are plate shaped and in which lines of weakness (cuts 34, 36 and 38 of figure 2 of Fay are weakened lines) and the at least one element being detachable by breaking along the line of weakening in the plate-shaped material (as described in the abstract).

Therefore, from the teaching of Fay, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the plate members of Landin to include equally spaced cuts like those in the teaching of Fay in order to enable the installer to easily change the size of the intumescent plate depending on the size of the spacing between the walls needed to be filled.

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9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landin (6,153,674) in view of Beele (5,344,106).

**Regarding claim 12**, Landin fails to explicitly disclose at least one of the elements is of tube-shaped design.

Beele teaches a fire resisting cable system in which tube shaped fire resistant intumescent members 12 having thermally expanding layers 14 and 15 are disposed.

Therefore, from the teaching of Beele, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the plate-shaped intumescent layers of Landin to include the teaching of adding tube shaped intumescent layers from the teaching of Beele in order to provide additional fire stopping abilities in between the cables thus further protecting the building from fire damage.

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1 and 5 have been considered but are moot in view of the new grounds of rejection.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not



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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON HOLLOWAY whose telephone number is (571) 270-5786. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JASON HOLLOWAY  
Examiner  
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JH

/KHOI TRAN/

Supervisory Patent Examiner, Art Unit 3664